

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 03/04744

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/705 C07K7/06 C12N15/12 A61K38/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, MEDLINE, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>BAILLY P ET AL: "THE LW BLOOD GROUP GLYCOPROTEIN IS HOMOLOGOUS TO INTERCELLULAR ADHESION MOLECULES" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 91, no. 12, 7 June 1994 (1994-06-07), pages 5306-5310, XP002013399 ISSN: 0027-8424 page 5307, left-hand column, last paragraph -page 5308, left-hand column, paragraph 3; figure 2</p> <p style="text-align: center;">-/-</p>	1-10

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

16 March 2004

Date of mailing of the international search report

31/03/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SPRING FRANCES A ET AL: "Intercellular adhesion molecule-4 binds alpha4beta1 and alphaV-family integrins through novel integrin-binding mechanisms"</p> <p>BLOOD, vol. 98, no. 2, 15 July 2001 (2001-07-15), pages 458-466, XP002273536 ISSN: 0006-4971 page 460, left-hand column, last paragraph -right-hand column, paragraph 2 figure 2</p>	1-10, 23, 24
X	<p>HERMAND PATRICIA ET AL: "Binding sites of leukocyte beta2 integrins (LFA-1, Mac-1) on the human ICAM-4/LW blood group protein"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 275, no. 34, 25 August 2000 (2000-08-25), pages 26002-26010, XP002273537 ISSN: 0021-9258 figure 1 figures 5,6</p>	1-10
A		11-22
P,X	<p>MANKELOW TOSTI J ET AL: "Identification of Amino-Acid Residues on Intercellular Adhesion Molecule-4 That Mediate Adhesion to Its alphav Integrin Ligands."</p> <p>BLOOD, vol. 100, no. 11, 16 November 2002 (2002-11-16), page Abstract No. 284 XP002273538 44th Annual Meeting of the American Society of Hematology; Philadelphia, PA, USA; December 06-10, 2002 ISSN: 0006-4971 abstract</p>	1-10

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 11-13 relate to a product and uses thereof whereby the product defined by reference to a desirable characteristic or property, namely, that it is an antagonist of the epitope as defined in claims 1 to 7 and/or of the footprint domains of claims 8 to 10. The claims cover all products having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such products. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the product by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the ICAM-4 antagonists as defined in SEQ ID NO:9-11 as defined in examples 2 and 3 and in claim 14. All other claims which relate to methods of using said antagonists (claims 15 and 16), to the use of the antagonists (claims 17-22) and to nucleic acids coding for the antagonists have been searched only as far as they relate to the specific antagonists of SEQ ID NO:9-11.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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